

Specification Sheet

CF19 – Silicone Elastomer Sponge

Availability:

The range of cellular silicone elastomers is available as profile extrusions, jointed rings, sheeting, which can be self-adhesive backed, strip and punching. They are particularly suited to use in high temperature seals and gaskets, where a soft, easily deformed rubber is required. There is a full range of standard colours available and the colour can be matched to customer requirements. Sheeting is available in standard rolls of width 1m, other widths can be produced upon request.

Specifications:

These products meet the flammability requirements of FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a) (I) (iv) and (a) (I) (v) horizontal flammability tests. Grade has been approved by the WRAS (Water Regulations Advisory Service) as material for use in contact with potable water at temperatures up to 85°C. The sponge is predominately-closed cell with low water absorption.

General Characteristics for Silicone Rubber:

Brittle Point	-80°C (-112°F)	ASTM D746
Limiting Oxygen Index	24.0%	BS 2872 Part 1
Thermal Conductivity	$6.4 \times 10^{-2} \text{ W.m}^{-1} \text{ K}^{-1}$	BS874 Part 2
Radiation Resistance	$>10^5$ Grays (10^7 Rads) typical	

Environmental Resistance:

Silicone rubber products have an excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionising radiation and weathering in general. Silicone rubber products produce very low levels of toxic fume when burnt. During testing at ATS 1000.001 none of the following gases were produced in detectable amounts: HNC, CO, NO, NO₂, SO₂, -H₂S, HF, HC1.

PROPERTY	SPECIFICATION LIMITS	TYPICAL VALUE	TEST METHOD
Density g/cm ³	250 +/-40	256	BSENISO 845
Hardness Shore OO Shore A	-	45 +/-5 +/-2	5 ASTM D2240
Compression Stress 40% Strain kPa	90 +/-40	90	BSENISO 3386 PART 1,2
Tensile Strength Nmm ⁻²	0.75 min	1.2	BSENISO 1798
Elongation to failure %	100 min	200%	BSENISO 1798
Temperature Range	n/a	-60° to 200°C	
Compression Set 50% compression 22 hours @ 70°C, 24 hours recovery	15% max	10%	BSENISO 1856

The information and data contained herein is believed to be accurate and reliable. However it is the user's responsibility to determine suitability for use. C B Frost & Co makes no warranties concerning fitness or suitability of its products for a particular use or purpose. C B Frost & Co reserve the right to alter the material specification at any time, without prior notice.